

ELECTRICITY CONSUMERS AND ELECTRICITY THEFT IN EDO STATE, NIGERIA: IMPLICATION FOR EFFICIENT POWER DISTRIBUTION

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Abstract

Over the years, Nigeria has faced the challenges of inadequate generation, supply, and distribution of power. There is growing concern about the pervasiveness of electricity theft in the country, suggested to be among the chief factors inhibiting electricity sector efficiencies. The present study aimed to ascertain the trend of electricity theft among electricity consumers in Edo state, Nigeria. The study adopted a survey method to examine the prevalence of electricity theft among households in randomly selected towns in Edo state, Nigeria. The study population comprised electricity consumers under the residential category described by the BEDC. A convenient sample of 217 residential consumers and BEDC officials completed the research questionnaires. The finding shows that 32.7% of the electricity consumers indicated they never participated in energy theft, while 67.3% showed high involvement. A linear regression analysis was conducted to answer whether electricity theft affects efficient power distribution in Edo state. The result demonstrated a statistically significant effect of electricity theft on efficient power distribution in Edo state $F(1, 12), 21.36 P < .05$. Also, the R^2 indicated that electricity theft contributed about 54.4% of the inefficiencies in power distribution in Edo state. Thus, it is concluded that the trend of electricity theft is high in the area of study and significantly affects the efficient distribution of electricity. The result provides valuable data to the government and electricity regulators.

Keyword: electricity theft, consumers, BEDC, power distribution